UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

12/02/2004

PETER S DARDI PH D
WESTMAN CHAMPLIN & KELLY PA
SUITE 1600 INTERNATIONAL CENTRE
900 SECOND AVENUE SOUTH
MINNEAPOLIS, MN 554023319

EXAMINER
MILLER, BRIAN E

PAPER NUMBER

ART UNIT

DATE MAILED: 12/02/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
00/457 816	12/00/1900	KEVIN ION SCHULZ	S01 12-0517	8100

TITLE OF INVENTION: DISC DRIVES HAVING FLEXIBLE CIRCUITS WITH LIQUID CRYSTAL POLYMER DIELECTRIC

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1370	\$0	\$1370	03/02/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATEN <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHT THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPO PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM TH MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THE STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOV REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (O AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WIL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is n claiming SMALL ENTITY status, check box 5a on Part B - Fee Transmittal and pay the PUBLICATION FEE (if required) and 1 the ISSUE FEE shown above.

- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) w your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax

(703) 746-4000

INSTRUCTIONS: This for appropriate. All further con indicated unless corrected be maintenance fee notification	respondence including the le below or directed otherwise	smitting the ISSU Patent, advance or in Block 1, by (a	E FEE and PUBL ders and notification) specifying a new	ICATION FEE (if requ n of maintenance fees v correspondence address	ired). Blocks I through 5 s will be mailed to the current ; and/or (b) indicating a sepa	hould be completed wh correspondence address arate "FEE ADDRESS"	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) 7590 12/02/2004				Note: A certificate of mailing can only be used for domestic mailings of Fee(s) Transmittal. This certificate cannot be used for any other accompany papers. Each additional paper, such as an assignment or formal drawing, m have its own certificate of mailing or transmission.			
PETER S DARD	I PH D			Ce	rtificate of Mailing or Trans	smission	
	MPLIN & KELLY PA			I hereby certify that the	his Fee(s) Transmittal is bein with sufficient postage for fir il Stop ISSUE FEE address PTO (703) 746-4000, on the c	g deposited with the Un	
	RNATIONAL CENTR	E		States Postal Service addressed to the Ma	with sufficient postage for fir il Stop ISSUE FEE address	above, or being facsim	
900 SECOND AVE		_		transmitted to the USI	PTO (703) 746-4000, on the o	late indicated below.	
MINNEAPOLIS, N						(Depositor's na	
,						(Signat	
						(D	
	FU DIC DATE		FIRST NAMED INVI	ENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
APPLICATION NO.	FILING DATE						
09/457,816	12/09/1999		KEVIN JON SCH	IULZ	S01.12-0517	8100	
TITLE OF INVENTION: D	ISC DRIVES HAVING FLE	EXIBLE CIRCUIT	'S WITH LIQUID C	RYSTAL POLYMER I	DIELECTRIC		
APPLN. TYPE	SMALL ENTITY	ISSUE F	EE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	nonprovisional NO \$1376)	\$0	\$1370	03/02/2005	
EXAMINER		ART UNIT		CLASS-SUBCLASS			
MILLER,	2652		360-245900	_			
1. Change of correspondence	address or indication of "Fe	ee Address" (37	2. For printing o	n the patent front page, l	ist		
CFR 1.363).			(1) the names o	f up to 3 registered pate	•		
Change of correspond Address form PTO/SB/12	ence address (or Change of e22) attached.	Correspondence	or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to				
"Fee Address" indicat PTO/SB/47; Rev 03-02 o Number is required.	ion (or "Fee Address" Indica or more recent) attached. Use	tion form e of a Customer	registered attorn 2 registered pate listed, no name	nt attorneys or agents. It	nes of up to no name is 3		
3. ASSIGNEE NAME AND	RESIDENCE DATA TO B	E PRINTED ON T	THE PATENT (prin	t or type)			
PLEASE NOTE: Unless recordation as set forth in	an assignee is identified be 37 CFR 3.11. Completion	low, no assignee of this form is NO	data will appear or T a substitute for fil	the patent. If an assigning an assignment.	nee is identified below, the d	locument has been filed	
(A) NAME OF ASSIGNI	EE	(B) RESIDENCE: (C	ITY and STATE OR CO	UNTRY)		
Please check the appropriate	assignee category or catego	ries (will not be nr	inted on the patent)	· Individual I C	Corporation or other private gr	oun entity Governm	
4a. The following fee(s) are			. Payment of Fee(s)		Solder Street St		
Issue Fee	chelosed.	70	A check in the amount of the fee(s) is enclosed.				
	mall entity discount permitte	.4\	Payment by credit card. Form PTO-2038 is attached.				
			The Director is hereby authorized by charge the required fee(s), or credit any overpayment				
Advance Order - # of	Copies			lumber			
5. Change in Entity Status	•	•					
• •	MALL ENTITY status. See				LL ENTITY status. See 37 C		
The Director of the USPTO NOTE: The Issue Fee and Printerest as shown by the reco	is requested to apply the Issu ublication Fee (if required) vords of the United States Pate	e Fee and Publica vill not be accepted ent and Trademark	tion Fee (if any) or d from anyone other Office.	to re-apply any previous than the applicant; a reg	ly paid issue fee to the applications attorney or agent; or t	ation identified above. he assignee or other part	
Authorized Signature			Date				
Typed or printed name _				Registration	1 No		
This collection of information	on is required by 37 CFR 1.3	11. The information	on is required to obt	ain or retain a benefit by	the public which is to file (an	d by the USPTO to proc	

an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to comp this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 14 Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/457,816	12/09/1999	KEVIN JON SCHULZ	S01.12-0517	8100	
7590 12/02/2004			EXAMINER		
PETER S DARD		MILLER, BRIAN E			
WESTMAN CHAMPLIN & KELLY PA SUITE 1600 INTERNATIONAL CENTRE			ART UNIT	PAPER NUMBER	
900 SECOND AVE	ENUE SOUTH	2652			
MINNEAPOLIS, N	IN 554023319	DATE MAILED: 12/02/2004			

Determination of Patent Term Extension under 35 U.S.C. 154 (b)

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 599 day(s). Any patent to issue from the above-identified application will include indication of the 599 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date th determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retriev (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.